Bridge Culvert Inspection

Bridge File Number	76114 -1 Bridge Culvert	Form Type	CULE
Year Built	1964	Lot No.	4
Bridge or Town Name	BRIGHTBANK	Inspector Name	Wade Nanninga
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	770:06 C1 0.898	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Oct-2012
Legal Land Location	NW SEC 5 TWP 51 RGE 2 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:16:03, 53:22:37	Data Entry Date	23-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	22-Oct-2012
Clear Roadway/Skew	13 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,550 / 2011 (A)	Dept. Review Date	13-Nov-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	60		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	2200	MP	7.5	125X26	2.8	ROUND
1	MAIN	-	1800	MP	20.1	68X13	2.8	ROUND
1	D/S	-	2200	MP	6.9	125X26	2.8	ROUND
Special Features		CONC FLOOR						
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required.										

Utilities (Located at)

Utility Attachments			
Telephone	W r/w	Gas	
Power	11 wire crosses N	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On superelevated curve. Typical access/entrance NW/SW. On uphill grade to North. No passing. Passing lane over pipe.
Vertical Alignment		6	6	
Roadway Width (m)	13.000			
Embankment		7	7	Wide crack in ACP
Sideslope (__:1)	3.0			
(Height of Cover(m) : **0.9**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	18-Oct-2012			
Special Features				
Special Feature		7	7	
(Type : **CONC FLOOR**)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)				
Measured At Ring No.				Est.
Sag (mm)	0			
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	2200			
Measured At Ring No.				At c/l.
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2200, Type: MP**)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date	18-Oct-2012			Rivet pipe
Special Features				
Special Feature		7	7	
(Type : **CONC FLOOR**)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				Est.
Measured At Ring No.				
Sag (mm)	30			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	1830			At c/l.
Measured At Ring No.				
Deflection (mm)	30			
Percent Deflection	2			
Floor		N	N	Covered with concrete.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	25			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP**)				
Longitudinal Seams		6	6	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		5	5	Superficial corrosion on rivet seams near ends.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	Stock pass.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**6**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		9	9	
Roadway Surface		5	5	
(Type :)				Concrete.
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		5	5	
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		**5**	**5**	

Maintenance Recommendations						
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**74.5/74.5**	Est. Repl. Yr	2030	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection		Department Comments	

Maintenance Reviewed By		Date		Estimated Total	0
Proposed Long-Term Strategy					
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Arnold Assenheimer	Previous Assistant's Name			
Next Inspection Date	18-Jan-2016	Previous Inspection Date	10-Jul-2009		
Inspection Cycle (Default) (months)	39				
Comment					